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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,632	12/20/2004	Jean-Claude Dulac	0528-1136	4959
466 7590 01/30/2007 YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER MCELHENY JR, DONALD E	
			ART UNIT 2857	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/30/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/518,632	Applicant(s) DULAC ET AL.	
	Examiner Donald E. McElheny, Jr.	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/20/06; 8/30/06 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

1. The drawings are again objected to as being informal for not meeting the requirements under 37 CFR 1.83 (a) and 1.84.

Applicant is reminded that each and every claim element must be found in the drawings as required by 37 CFR 1.83(a), 1.84(h) & (j), and MPEP 608.02(d), and also the drawings and specification must describe, show and correspond for all components shown or discussed as required by 37 CFR 1.84(p). The drawings must show every feature of the invention specified in the claims, including not only claimed structure (e.g. various means-plus-function) but also all inventive method, algorithm and program related steps within some form of flowchart(s). For mathematical related algorithms see 37 CFR 1.84(d). If a lack of correspondence between the claims and figures is merely a matter of applicant using different language in the claims than that found in the figures, then the intended correlation, basis and support for their equivalence must be shown for where claim elements exist within the figures and written disclosure.

Applicant is reminded the figures must also comply with 37 CFR 1.84(p)(5) to include unique reference numerals for each of different figure items depicted and a corresponding reference thereto in the written description. The same reference numeral may be used in different drawings, but if such occurs it must be to the identical component/item.

If amendment of the figures is required then note no new matter is permitted to be added to the drawings.

Response to applicants' arguments:

Applicants argue that the various means are not directed to software code but rather structure, and that such structure would be readily recognized as that well known in the prior art. Applicants written specification, as best, shows no structure in the drawings for each specified means and describes on pages 12 and 13 that the device for the practice of the process is at best merely runs computer software for the claimed steps/means for the claimed functions. Thus the computer implemented invention is still the gist of and what each of the different category of claims are artfully drafted to cover, not unique physical structures. The specification as filed supports nothing more than such interpretation. Applicants should either point out each specific structural means in the figures, as they apparently have argued as the basis for the various means of device claims, or clearly state for the record that the computer implementation is the basis for such means.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 8 is objected to under 37 CFR 1.75(c), as being indefinite. As required by 35 U.S.C. 112, first paragraph, the claims must clear, definite and positive in their limitations. The phrase "using the process" in claim 8 renders the claim indefinite because it is unclear what process is being referenced.

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2857

5. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims do not meet the requirements as set forth in the recently updated "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" ("Guidelines"), see United States Patent and Trademark Office OG Notices: 22 November 2005.

These claims are directed to a computer implemented invention, albeit artfully crafted in its various claimed forms as process, computer storage medium holding the software process, or a device which is a computer implementing the software process. As defined by applicants' written specification this may be embodied only as computer program code per se.

Claims that are directed either explicitly only to an abstract idea, or verbal description of a mathematical algorithm, or to a computer running an abstract idea algorithm process, and lack any requisite real world practical utility with either a physical transformation, or useful, tangible and concrete results, are considered non-statutory under the "Guidelines". Note that under current updated Office policy even when a physical input sensor supplies the real-world input data, or a computer system is recited, such does not place the claimed invention in a safe harbor of statutory subject matter, but the claimed algorithmic based invention is analyzed under the Guidelines to determine if it meets the required statutory subject matter conditions set forth therein. Mere calculations (whether using a computer or not) upon data from a real world sensor without any explicit recitation in the claim body of the real world useful, tangible and

Art Unit: 2857

concrete results (i.e. real world practical utility, real world repeatable results, and real world physical results), are still non-statutory subject matter under the above noted new 101 practice. Claims, such as claim 20, which state limitations to the effect "for the display on a screen ..." are still deemed non-statutory until the actual explicit accomplishment of displaying the results so they are positively tangible and concrete in the real world. Intended or desired results are not given patentable weight. Take note that the claims are still deemed to merely call for mere calculations, and many appear incomplete and lack accomplishment of the purpose stated in the preamble, such as for example the determining locally the shape of geological horizons, which is not seen to ever have been accomplished to complete the preamble purpose, nor so completed as a tangible and concrete statutory result.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald E. McElheny, Jr. whose telephone number is 571-272-2218. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoff Marc, can be reached on weekdays at telephone number 571-272-2218. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2857

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Donald E. McElheny, Jr.
Primary Examiner
Art Unit 2857